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EXAMINER

LEWIS, DAVID LEE

ART UNIT PAPER NUMBER

2673

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,154

Applicant(s)

AOKI, SHIN

Examiner

David L Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,8-10,12-18,21,23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,8-10,12-18,21,23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al. (5805118) in view of Moore (6587082) and Odryna et al. (6104414).**
2. **As Amended in claim 1, Mishra et al. teaches** of an image-transmitting device connected to a plurality of image display devices, **figure 1**, wherein said bus cable is equivalent to known means for connecting monitors 30-35 to workstations CPU's 24, said image-transmitting device comprising: a memory unit storing a set of screen data, **figure 1 item 24, column 29 lines 25-35**, each individual of said set of screen data corresponding to one of said plurality of image-display devices, **column 4 lines 3-7, column 8 line 65 to column 9 line 2**, said memory unit further storing a displaying order of said individual of said set of screen data to be displayed on said corresponding image display devices, wherein an array of the layout is stored for each workspace unit that is to be displayed in sequential synchronism on a plurality of display screens,

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column 9 lines 45-64, column 10 lines 1-16, column 29 lines 25-35; a transmission-data generating unit selecting specific screen data from among the set of the screen data by following the correspondence between each individual of said set of screen data and respective of said image display devices and the displaying order, and generating transmission data that each of said image-display devices is to display based on the selected specific screen data, **column 10 lines 43-65, column 29 lines 1-25, 36-65,** wherein the user selects images for display as controlled by the CPU which facilitates transmission data generation based on the image display system CINAD; and a transmission unit transmitting the transmission data from said bus interface through the bus cable to each of said image-display devices, **figure 1 item 22, 24,** wherein the workstation computer inherently includes appropriate transmitting means for the purpose of displaying an image on the display device as is known. **However Mishra does not explicitly teach of** a bus cable or a bus interface connected to said image display devices through the bus cable. **Moore teaches of** a bus cable for an image device connected to a plurality of image display devices, figure 1 item 30, figure 2 item 50, in support of what Mishra obviously suggests for connecting the computer to the plurality of displays, figure 1 items 24 and 30-35, as is known. **Odryna et al. teaches of** a bus interface connected to said image-display devices through the bus cable, column 4 lines 13-31, figure 2, for the same purpose as Mishra and Moore, connecting the computer to a plurality of displays. In particular Odryna teaches of a USB type bus interface and cable for said connection. **Therefore it would have been obvious** to the skilled artisan at the time of the invention to provide the bus cable and interface as

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taught by Moore and Odryna et al., in the system of Mishra, because both Moore and Odryna et al., teach said bus cable and interface are useful means for connecting a computer to a plurality of display devices for the purpose of display images on said displays, as found in claim 1. **Further, Mishra further teaches of** an instruction input unit, figure 1 item 1 item 26, that is used by a user to select one of the screen data and one of said image-display devices through a graphical user interface (GUI), column 3 lines 65-67, column 5 lines 25-27, column 6 lines 1-12, column 6 lines 60-67, and to direct the selected image-display device to display the selected screen data, column 9 lines 1-25, column 10 lines 45-65, wherein the transmission data is generated based on the selected screen data by said transmission data generating unit, column 9 lines 1-25, column 10 lines 45-65, and then is transmitted to the selected image-display device by said transmission unit, column 29 lines 25-35. Wherein the instruction input unit, the keyboard connected to the workstation, in conjunction with the Customizable Image Navigation and Display System (CINAD) which serves as the Graphical User Interface to display and navigate images, wherein the images are transmitted by the workstation to the display according to the user's selections while interfacing with the CINAD, is used as claimed.

3. **As in claim 2, Mishra et al. teaches of** wherein said memory unit further includes a two-dimensional arrangement in which file names of the screen data are placed in a position corresponding to an image-display device that is to display said screen data and the displaying order of said screen data, column 9 lines 57-62. **As in**

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claim 3, Mishra et al. teaches of further comprising a setting unit by which a user sets the correspondence of the screen data to each of said image-display devices and the displaying order of the screen data in advance, column 9 lines 34-46, column 24 lines 14-25. **As in claim 4**, Mishra et al. teaches of further comprising: an instruction-input unit being used for inputting an instruction by a user to said image transmitting device through a GUI (Graphical User Interface), column 7 lines 10-19, column 9 lines 34-46, column 24 lines 14-25; and a setting unit setting the correspondence of the screen data to each of said image-display devices, column 29 lines 25-35, and the displaying order of the screen data in advance by following the instruction inputted by the user through said instruction-input unit, column 4 lines 1-8, column 9 lines 34-46, column 24 lines 14-25. **As in claim 8**, Mishra et al. in view of Odryna et al. teaches of wherein said image-transmitting device is a computer including a USB (Universal Serial Bus) interface as said bus interface, and said bus cable is a USB cable, Odryna et al., figure 1 item 39, 100, column 3 lines 10-15.

4. Claims 9 and 18, 20, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al. (5805118) in view of Odryna et al. (6104414).

5. As amended in claim 9, Mishra et al. teaches of an image-display system including a control device and a plurality of image-display devices connected to said

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control device, **figure 1 items 22, 30-35**, wherein said bus cable is equivalent to known means for connecting monitors to workstations, said control device comprising: a memory unit storing a set of screen data, **figure 1 item 24**, each individual of said set of screen data corresponding to one of said plurality of image-display devices, **column 8 line 66 to column 9 line 2**, said memory unit further storing a displaying order of said individual of said set of screen data to be displayed on said corresponding image-display devices, **column 9 lines 35-64, column 10 lines 1-16, column 29 lines 25-35**, wherein an array of the layout is stored for each workspace unit that is to be displayed in sequential synchronism on a plurality of display screens; a transmission-data-generating unit selecting specific screen data from among the set of the screen data by following the correspondence between each individual of said set of screen data and respective of said image display devices and the displaying order, and generating transmission data that each of said image-display devices is to display based on the selected specific screen data, wherein the user selects images for display, **column 10 lines 43-65, column 29 lines 1-25, 36-65**; and a transmission unit transmitting the transmission data to each of said image-display devices, **figure 1 item 22, 24**, wherein the workstation computer includes appropriate transmitting means for the purpose of displaying an image on the display device as is known. **However Mishra does not explicitly teach of a bus a bus interface connected to said image-display devices through the bus cable. Odryna et al. teaches of a bus interface connected to said image-display devices through the bus cable, column 4 lines 13-31, figure 2, for the same purpose as Mishra, connecting the computer to a plurality of displays. In particular**

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Odryna teaches of a USB type bus interface and cable for said connection. **Therefore it would have been obvious** to the skilled artisan at the time of the invention to provide the bus cable and interface as taught by Odryna et al., in the system of Mishra, because Odryna et al., teaches said bus cable and interface are useful means for connecting a computer to a plurality of display devices for the purpose of display images on said displays, as found in claim 9.

6. **Further as Amended in Claims 9, 18, 20, and 23, Mishra further teaches of** an instruction input unit, figure 1 item 26, that is used by a user to select one of the screen data and one of said image-display devices through a graphical user interface (GUI), column 3 lines 65-67, column 5 lines 25-27, column 6 lines 1-12, column 6 lines 60-67, and to direct the selected image-display device to display the selected screen data, column 9 lines 1-25, column 10 lines 45-65, wherein the transmission data is generated based on the selected screen data by said transmission data generating unit, column 9 lines 1-25, column 10 lines 45-65, and then is transmitted to the selected image-display device by said transmission unit, column 29 lines 25-35. Wherein the instruction input unit, the keyboard connected to the workstation, in conjunction with the Customizable Image Navigation and Display System (CINAD) which serves as the Graphical User Interface to display and navigate images, wherein the images are transmitted by the workstation to the display according to the user's selections while interfacing with the CINAD, is used as claimed.

7. **As in claim 18, Mishra et al. teaches of a method of controlling screen data displayed on a plurality of image-display devices connected to a control device, figure 1, said method comprising the steps of storing a set of the screen data, column 29 lines 25-35, each individual of said set of screen data corresponding to one of said plurality of imagedisplay devices, column 8 line 66 to column 9 line 2, column 29 lines 25-35, and further storing a displaying order of said individual of said set of screen data to be displayed on said corresponding image-display devices, column 9 lines 35-64, column 10 lines 1-16, in said control device, figure 1 items 22!24; selecting the screen data corresponding to each of said image-display devices from among the set of the screen data by following the correspondence between each individual of said set of screen data and respective of said image display devices and the displaying order, column 10 lines 43-65, column 29 lines 1-25, 36-65; and updating the screen data displayed on each of said image-display devices simultaneously based on the selected screen data, column 9 lines 14-23, column 12 lines 1-23. However Mishra et al. is silent as to said bus interface. As argued above in claim 9, Odryna et al. teaches of a bus interface connected to said image-display devices through the bus cable, column 4 lines 13-31, figure 2, for the same purpose implied by Mishra, connecting the computer to a plurality of displays. In particular Odryna teaches of a USB type bus interface and cable for said connection. Therefore it would have been obvious to the skilled artisan at the time of the invention to provide the bus cable and interface as taught by Odryna et al., in the system of Mishra, because Odryna et al. teaches said bus cable and**

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interface are useful means for connecting a computer to a plurality of display devices for the purpose of display images on said displays, as found in claim 18.

8. **As in claim 20**, Mshra et al. teaches of a method of controlling screen data displayed on a plurality of image-display devices connected to a control device, **figure 1**, said method comprising the steps of storing a set of the screen data, **column 29 lines 25-35**, each individual of said set of screen data corresponding to one of said plurality of imagedisplay devices, **column 8 line 66 to column 9 line 2, column 29 lines 25-35**, and further storing a displaying order of said individual of said set of screen data to be displayed on said corresponding image-display devices, , in said control device, **column 9 lines 35-64, column 10 lines 1-16, figure 1 items 22/24**; selecting the screen data corresponding to each of said image-display devices from among the set of the screen data by following the correspondence between each individual of said set of screen data and respective of said plurality of image display devices and the displaying order, **column 10 lines 43-65, column 29 lines 1-25, 36-65**; generating transmission data that each of said image-display devices is to display based on the selected screen data, **column 4 lines 1-7, column 10 lines 43-67**; and transmitting the transmission data to each of said image-display devices, **column 10 lines 43-67**. Wherein displaying and managing a set of related images within a user configurable, workstation tailorable display protocol is taught, and said data generation and transmission are inherent to the displaying data that is selected and controlled by the software generated algorithms within the system. **However Mishra et al. is silent as to**

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said bus interface. As argued above, **Odryna et al. teaches** of a bus interface connected to said image-display devices through the bus cable, column 4 lines 13-31, figure 2, for the same purpose implied by Mishra, connecting the computer to a plurality of displays. In particular Odryna teaches of a USB type bus interface and cable for said connection. **Therefore it would have been obvious** to the skilled artisan at the time of the invention to provide the bus cable and interface as taught by Odryna et al., in the system of Mishra, because Odryna et al. teaches said bus cable and interface are useful means for connecting a computer to a plurality of display devices for the purpose of display images on said displays, as found in claim 20.

9. **As in claims 21 and 24, Mishra et al. teaches of** comprising the steps of inputting an instruction to said control device (or image transmitting device) through a GUI (Graphical User Interface), column 7 lines 11-22, column 28 lines 42-67, column 29 lines 1-25; and setting the correspondence of the screen data to each of said image-display devices and the displaying order of the screen data by following the instruction inputted, column 23 lines 7-65, column 24 lines 20-25 and 40-67, column 29 lines 48-54.

10. **As in claim 23, Mishra et al. teaches of** a record medium readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for controlling images displayed on a plurality of image-display devices connected to an image-transmitting device, **figure 1, column 1 lines 1-7**, said

method steps comprising: storing a set of screen data, **figure 1 item 24, column 29 lines 25-35**, each individual of said set of screen data corresponding to one of said plurality of imagedisplay devices, **column 4 lines 3-7, column 8 line 65 to column 9 line 2**, and further storing a displaying order of said individual of said set of screen data to be displayed on said corresponding image-display devices, in said control device, **column 9 lines 45-64, column 10 lines 1-16, column 29 lines 25-35**; selecting the screen data corresponding to each of said image-display devices from among the set of the screen data by following the correspondence between each individual of said set of screen data and respective of said plurality of image display devices and the displaying order, **column 10 lines 43-65, column 29 lines 1-25, 36-65**; generating transmission data that each of said imagedisplay devices is to display based on the selected screen data, **column 4 lines 1-7, column 10 lines 43-67**; and transmitting the transmission data to each of said imagedisplay devices through said bus interface, **figure 1 item 22, 24**. However Mishra et al. is silent as to said bus interface. As argued above, Odryna et al. teaches of a bus interface connected to said image-display devices through the bus cable, **column 4 lines 13-31, figure 2**, for the same purpose implied by Mishra, connecting the computer to a plurality of displays. In particular Odryna teaches of a USB type bus interface and cable for said connection. **Therefore it would have been obvious** to the skilled artisan at the time of the invention to provide the bus cable and interface as taught by Odryna et al., in the system of Mishra, because Odryna et al. teaches said bus cable and interface are useful means for connecting a computer to a

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plurality of display devices for the purpose of display images on said displays, as found in claim 23.

11. Claims 10 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Mishra et al. (5805118).

12. **As in claim 10**, Mishra et al. teaches of an image-display system. comprising: a computer including a primary image-display device that displays a document including a plurality of pages, figure 1 item 22, 24, 30-35; a plurality of image-display devices that are connected to said computer, figure 1 item 30-35, and that are configured to display the document, column 4 lines 4-21; and a user interface configured to allow a user to relate a specific page in the document to a specific image-display device among said plurality of image-display devices in a one-to-one correspondence between said specific page and a respective specific of the plurality of image-display devices, column 8 lines 45-50, column 9 lines 1-2, column 10 lines 43-67, column 12 lines 1-23 and 35-45. As Amended in Claim 10, Mishra further teaches of an instruction input unit, figure 1 item 26, that is used by a user to select one of the screen data and one of said image display devices through a graphical user interface (GUI), column 3 lines 65-67, column 5 lines 25-27, column 6 lines 1-12, column 6 lines 60-67, and to direct the selected image display device to display the selected screen data, column 9 lines 1-25, column 10 lines 45-65, wherein the transmission data is generated based on the selected screen data by said transmission data generating unit, column 9 lines 1-25, column 10 lines 45-65,

and then is transmitted to the selected image-display device by said transmission unit, column 29 lines 25-35. Wherein the instruction input unit, the keyboard connected to the workstation, in conjunction with the Customizable Image Navigation and Display System (CINAD) which serves as the Graphical User Interface to display and navigate images, wherein the images are transmitted by the workstation to the display according to the user's selections while interfacing with the CINAD, is used as claimed.

13. **As in claim 12**, Mishra et al. teaches of wherein said image-display system displays identification information of said image-display device and information about correspondence of said image display device to the specific page when displaying the specific page on said image-display device, column 10 lines 43-67, column 12 lines 35-45. **As in claim 13**, Mishra et al. teaches of wherein said user interface allocates the specific page to the icon by dragging and dropping said specific page to said icon, column 29 lines 1-25 and 36-55. **As in claim 14**, Mishra et al. teaches of wherein said user interface displays a menu on one of the specific page and an area indicating the specific page on the primary image-display device, column 9 lines 15-25, said menu being used for selecting the image display device to display the specific page thereon, column 10 lines 43-67, column 24 lines 14-24. **As in claim 15**, Mishra et al. teaches of wherein said image-display system allocates each of previously displayed screen data and screen data to be displayed next to currently displayed screen data on said primary image-display device to any of said image-display devices, column 9 lines 1-25, column 10 lines 43-67. **As in claim 16**, Mishra et al. teaches of wherein said image-display

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system displays a scroll button on a screen of said primary image-display device, said scroll button being used for scrolling the screen of the image-display device displaying said specific page, column 4 lines 8-20, column 7 lines 4-10 and 23-31, (not shown) however inherent to window based interfacing. **As in claim 17**, Mishra et al. teaches of wherein said document is a hypertext document, and each page of said document includes links to other pages, column 9 lines 10-15, column 10 lines 43-67, column 13 lines 9-51.

14. **As amended (on 7/20/2004) in claims 1, 9, 18, 20, and 23** Mishra teaches where said transmission data is area updating data that includes data specifying an updating area of the screen data displayed on an image display device and data used for updating part of the screen data displayed in the updating area, column 8 line 64 to column 9 line 3, column 9 lines 57-67. Wherein the updating area corresponds to a display area of one or more screens as a single unit, and the area updating data corresponds to the virtual page having a layout specifying the exact positions, screen number, and handle to the actual image object.

15. **As in amended (on 7/20/2004) in claim 10**, Mishra teaches of wherein said user interface displays icons indicating said image display devices on said primary image display device, and allocates the specific page to an icon to display the specific page on an image display device corresponding to the icon,

column 29 lines 1-25. Wherein Mishra teaches of user selectable miniature images that can be selected for full blown images viewing.

Response to Arguments

16. Applicant's arguments filed 7/20/2004 have been fully considered but they are not persuasive. Applicant argues that Mishra does not teach selecting on of the screen data and one of said image display devices. The Examiner disagrees. Mishra teaches of customizable interface with selectable miniature images, column 29 lines 1-25, that are within the context of the user interface, that can be selected within a pre/post mode, overview mode, or annotated mode. Here Mishra controls which of different pages of a document stored are provided to which image device. Applicant argues that Mishra fails to teach an updating area. The Examiner disagrees. Mishra teaches wherein the updating area corresponds to a display area of one or more screens as a single unit, and the area updating data corresponds to the virtual page having a layout specifying the exact positions, screen number, and handle to the actual image object. Rejection maintained.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Lewis whose telephone number is (703) 306-3026. The examiner can normally be reached on MT and TIF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin

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Shalwala, can be reached on (703) 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to

Crystal Park 11, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

February 22, 2005



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600